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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,497	08/24/2001	Timothy R. Faber	CRC-148/47181-00248	3304

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EXAMINER
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LUK, LAWRENCE W

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/939,497	Applicant(s) FABER ET AL.	
	Examiner Lawrence W. Luk	Art Unit 2187	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.  
 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 9-14, 23 and 32 is/are allowed.  
 6) ☒ Claim(s) 1-3, 15-17, 24-26, 33 and 34 is/are rejected.  
 7) ☐ Claim(s) 4-8, 18-22 and 27-31 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*PD*

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 15, 17, 24, 26, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heft (3,448,231) in view of Pippel et al. (5,762,667).

#### **Claims 1, 15 and 24**

As to claims 1, 15 and 24, Heft disclose in figure 1, 3 and 7, an improved filter assembly for a circuit breaker comprising: a filter housing (12) having at least two filter mounting zones (45, 46, 47) for receiving at least two filter assemblies, so as to define, in the aggregate, a filter assembly (see figure 3 and 7, column 5, lines 15-26).

Heft does not disclose expressly **at least two filter assemblies configured for interfitting with said filter mounting zones of said filter housing, each said filter assembly comprising a filter body having a given peripheral configuration and a filter gasket configured for interfitting about a periphery of said filter body for sealingly engaging said filter body relative to said filter housing in response to forces encountered by said filter assembly both upon assembly and in operation.**

Pippel et al. disclose in figure 3, at least two filter (22, 24) assemblies configured for interfitting with said filter mounting zones of said filter housing (12), each said filter assembly comprising a filter body having a given peripheral configuration and a filter

gasket **(128)** configured for interfitting about a periphery of said filter body **(12)** for sealingly engaging said filter body relative to said filter housing in response to forces encountered by said filter assembly both upon assembly and in operation **(see figure 3, column 6, lines 4-6 and column 6, lines 17-26)**.

Heft and Pippel et al. are analogous art because they are from same field of endeavor of air filter systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the filter assembly in pippel et al. having a given peripheral configuration and a filter gasket in the at least two filter assemblies of the filter housing of Heft.

The suggestion/motivation for doing so would have been for sealing the filter by compressing the gasket between the filter and bearing surface and securing by conventional adhesives **(see column 6, lines 2-6 of Pippel et al.)**.

Therefore, it would have been obvious to combine Pippel et al. with Heft for the benefit of sealing the filter with a gasket in the filter assembly to avoid leakage paths around the filter to obtain the invention as specified in claim 1.

**Claim 33**

As to claim 33, Heft disclose in figure 1, 3 and 7, a method for assembling a circuit breaker assembly, comprising: providing a filter housing **(12)** and at least two filter assemblies, said filter housing having at least two filter mounting zones **(45, 46, 47)**, each of said filter assemblies including a filter body having a peripheral configuration **(see figure 3 and 7, column 5, lines 15-26)**;

Heft does not disclose expressly **interfitting a filter gasket about a periphery of said filter body for sealingly engaging said filter body relative to said filter housing in response to forces encountered by said filter assemblies both upon assembly and in operation; and interfitting said filter assemblies in said filter mounting zones, each of said filter mounting zones receiving one of said filter assemblies.**

Pippel et al. disclose in figure 3, interfitting a filter gasket **(128)** about a periphery of said filter body for sealingly engaging said filter body relative to said filter housing **(12)** in response to forces encountered by said filter assemblies both upon assembly and in operation; and interfitting said filter assemblies in said filter mounting zones, each of said filter mounting zones receiving one of said filter assemblies. **(see figure 3, column 6, lines 4-6 and column 6, lines 17-26).**

Heft and Pippel et al. are analogous art because they are from same field of endeavor of air filter systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the filter assembly in pippel et al. having a given peripheral configuration and a filter gasket in the at least two filter assemblies of the filter housing of Heft.

The suggestion/motivation for doing so would have been for sealing the filter by compressing the gasket between the filter and bearing surface and securing by conventional adhesives **(see column 6, lines 2-6 of Pippel et al.).**

Therefore, it would have been obvious to combine Pippel et al. with Heft for the benefit of sealing the filter with a gasket in the filter assembly to avoid leakage paths around the filter to obtain the invention as specified in claim 33.

**Claim 34**

As to claim 34, Heft disclose in figure 1, 3 and 7, a circuit breaker assembly, comprising: a filter housing **(12)** having at least two filter mounting zones **(45, 46, 47)**; and at least two filter assemblies, each of said filter assemblies being configured for interfitting a respective one of said filter mounting zones. **(see figure 3 and 7, column 5, lines 22).**

Heft does not disclose expressly **each of said filter assemblies including a filter body having a given peripheral configuration and a filter gasket configured for interfitting about a periphery of said filter body for sealingly engaging said filter body relative to said filter housing in response to forces encountered by said filter assembly both upon assembly and in operation.**

Pippel et al. disclose in figure 3, each of said filter assemblies including a filter body having a given peripheral configuration and a filter gasket **(128)** configured for interfitting about a periphery of said filter body for sealingly engaging said filter body relative to said filter housing **(12)** in response to forces encountered by said filter assembly both upon assembly and in operation. **(see figure 3, column 6, lines 4-6 and column 6, lines 17-26).**

Heft and Pippel et al. are analogous art because they are from same field of endeavor of air filter systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the filter assembly in pippel et al. having a given peripheral configuration and a filter gasket in the at least two filter assemblies of the filter housing of Heft.

The suggestion/motivation for doing so would have been for sealing the filter by compressing the gasket between the filter and bearing surface and securing by conventional adhesives (**see column 6, lines 2-6 of Pippel et al.**).

Therefore, it would have been obvious to combine Pippel et al. with Heft for the benefit of sealing the filter with a gasket in the filter assembly to avoid leakage paths around the filter to obtain the invention as specified in claim 34.

**Claims 3, 17 and 26**

As to claims 3, 17 and 26, Heft in view of Pippel et al. are applied supra, and Pippel et al. further disclose in figure 3, each of said filter bodies has a peripheral recessed portion for positioning, mounting and bearing against a complementary edge portion of said filter gasket. (see column 3, lines 56-59 and column 6, lines 4-6).

3. Claims 2, 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heft (3,448,231) in view of Pippel et al. (5,762,667) as applied to claims 1, 15 and 24 above, and further in view of Lanier, Jr. et al. (5,795,361).

**Claims 2, 16 and 25**

As to claims 2, 16 and 25, Heft in view of Pippel et al. disclose the elements as claimed except Heft in view of Pippel et al. fails to teach the limitation of **“said filter gaskets are comprised of a silicone material”**.

Lanier, Jr. et al. disclose in column 3, lines 51-58, said filter gaskets are comprised of a silicone material.

Heft, Pippel et al. and Lanier, Jr. et al. are analogous art because they are from same field of endeavor of air filter systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the filter gaskets are comprised of a silicone material.

The suggestion/motivation for doing so would have been for sealing the filter by compressing the gasket (54) and the seal lip (52) are formed simultaneously by cast molding of polyurethane foam or any other type of suitable, flexible sealing material such as, for example, plastisol or silicone. **(see column 3, lines 52-58 of Lanier, Jr. et al.)**.

Therefore, it would have been obvious to combine Lanier, Jr. et al. with Pippel et al. and Heft for the benefit of the gasket is formed of polyurethane foam or any other flexible sealing material such as plastisol or silicone to obtain the invention as specified in claim 2, 16 and 25.

**Allowable Subject Matter**

4. **Claims 9-14, 23 and 32 are allowed.**



**Claim 9**

The primary reason for allowance of the claim 9 is the inclusion of **said molded coarse hole diffuser comprising a combined coarse hole diffuser and spacer integrally molded as a single, one-piece unit, said coarse hole diffuser including means for engaging and interfitting with a filter housing in close overlying engagement with a small hole diffuser.**

**Claims 10-12** depend from claim 9 and therefore are allowable for at least the same reasons noted above with respect to claim 9.

**Claim 13**

The primary reason for allowance of the claim 13 is the inclusion of **a small hole diffuser having a peripheral configuration similar to the peripheral configuration of said filter bodies, in the aggregate, when assembled with said filter housing and configured for interfitting within said filter housing, superimposed over said filter assemblies; a spacer interposed between said filters and said small hole diffuser; and a molded coarse hole diffuser, defining a combined diffuser and spacer integrally molded as a single, one-piece unit, said coarse hole diffuser including means for engaging and interfitting with said filter housing in close overlying engagement with said small hole diffuser.**

**Claims 14** depend from claim 13 and therefore are allowable for at least the same reasons noted above with respect to claim 13.

**Claim 32**

The primary reason for allowance of the claim 32 is the inclusion of **means for engaging a molded coarse hole diffuser, defining a combined diffuser and spacer integrally molded as a single, one-piece unit, with said filter housing in close overlying engagement with said small hole diffuser; and means for diffusing said arc, comprising: means for positioning and maintaining said arc stack and said filter assembly in assembled relation within said breaker housing, including maintaining compression on said gaskets and maintaining constant assembly force upon said assembly, equalizing compression loading of said gaskets and providing final positioning of the arc stack and filter assembly into the breaker case.**

5. **Claims 4-8, 18-22 and 27-31** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent from including all of the limitations of the base claims and any intervening claims.

The primary reasons for allowance of claim 4, 18 and 27 in the instant application is the combination with the inclusion in these claims that **a small hole diffuser having a peripheral configuration similar to the peripheral configuration of said filter bodies, in the aggregate, when assembled with said filter housing and configured for interfitting within said filter housing, superimposed over said filter assemblies; a spacer interposed between said filters and said small hole diffuser; and a molded coarse hole diffuser, defining a combined diffuser and spacer**

Art Unit: 2187

**integrally molded as a single, one-piece unit, said coarse hole diffuser including means for engaging and interfitting with said filter housing in close overlying engagement with said small hole diffuser.** The prior art of record neither anticipates nor renders obvious the above recited combination.

**Claims 5 and 8** depend from claim 4 and therefore are allowable for at least the same reasons noted above with respect to claim 4.

**Claims 19 and 22** depend from claim 18 and therefore are allowable for at least the same reasons noted above with respect to claim 18.

**Claims 28 and 31** depend from claim 27 and therefore are allowable for at least the same reasons noted above with respect to claim 27.

The primary reasons for allowance of claim 6, 20 and 29 in the instant application is the combination with the inclusion in these claims that **said filter housing comprises a frame-like, one-piece molded member having a recessed area for receiving each of said filter elements and an associated gasket therewithin, including separate areas for cooperatively interfitting with and bearing against edges of said gaskets opposite edges thereof bearing against said filter elements, and a projecting frame-like peripheral portion extending outwardly for surrounding engagement with said filter elements, said spacer and said small hole diffuser.** The prior art of record neither anticipates nor renders obvious the above recited combination.

**Claims 5 and 8** depend from claim 4 and therefore are allowable for at least the same reasons noted above with respect to claim 4.

**Claims 19 and 22** depend from claim 18 and therefore are allowable for at least the same reasons noted above with respect to claim 18.

**Claims 28 and 31** depend from claim 27 and therefore are allowable for at least the same reasons noted above with respect to claim 27.

**: IMPORTANT NOTE :**

If the applicant should choose to rewrite the independent claims to include the limitation recited in claims 4-8, 18-22 and 27-31 the applicant is encouraged to amend the **title of the invention** such that it is descriptive of the invention as claimed as required by sec. **606.01** of the **MPEP**. Furthermore, the **Summary of the Invention** and the **Abstract** should be amended to bring them into harmony with the allowed claims as required by paragraph 2 of **§ 1302.01** of the **MPEP**.

As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See **37 C. F. R. § 1.111(b)** and **§ 707.07 (a)** of the **M.P.E.P.**

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks can be reached on (571) 272-4201. The fax phone

Art Unit: 2187

number for the organization where this application or proceeding are (703) 746-7239, (571) 272-2100 for regular communication and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to receptionist whose telephone number is (571) 272-2100.

LWL  
August 15, 2005

*Lawrence Ruk*

*examiner*

*8/16/05*